

## ***MDL-III Series Line Laser***



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The laser is made features of high power, high straightness, perfect line uniformity and high stability to adapt to various environments.

The user can choose from IR, red, green, blue, violet or UV wavelengths depending on the application and material to be inspected.

MDL-III Series Line Laser with its stable performance, high reliability works professionally in road detection, railway detection, tunnel and high-speed rail detection, etc.

### ***FEATURES***

- Output power up to 2500mW
- Wavelengths from 375 to 1550nm
- TTL modulation up to 100kHz
- Analog modulation up to 100kHz

### ***APPLICATIONS***

- Road detection
- Railway detection
- Tunnel detection
- High-speed rail detection



## SYSTEM SPECIFICATION\*

|   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Wavelength<br>(nm)                            | 375   | 405 | 488 | 450 | 520 | 640 | 655 | 750 | 785 | 808 | 830 | 852 | 915 | 940 | 980 | 1060 | 1470 | 1550 |
| Wavelength<br>tolerance<br>(nm, typical)      | ±5  | ±5  | ±5  | ±5  | ±10 | ±5  | ±10 | ±5  | ±10 | ±5  | ±10 | ±10 | ±5  | ±5  | ±10 | ±5   | ±10  | ±20  |
| Max. power<br>(W)                             | 0.3   | 1   | 0.4 | 1   | 0.8 | 0.2 | 1   | 2   | 2.5 | 2.5 | 2   | 1.5 | 1.5 | 1   | 2   | 1.5  | 0.5  | 1    |
| Power stability<br>(rms, over 4hours)         | <1%, <2%, <3%   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Line angle                                    | 5°, 7°, 10°, 15°, 30°, 45°, 50°, 60°, 75°, 90°, 100°<br>(Other angles are available upon request) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Laser operation mode                          | CW  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Luminance uniformity                          | 80%   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Straightness error                            | Less than 0.5%  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| 85% peak power proportion<br>in corss-section | 95%   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Temperature & power stability                 | Less than 0.5%  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
| Expected lifetime                             | 10,000  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |

## ELECTRICAL SPECIFICATIONS

|                         |     |                                     |                                 |                                   |
|-------------------------|-----|-------------------------------------|---------------------------------|-----------------------------------|
| Power supply            |     | PSU-III-LED                         | PSU-III-FDA                     | PSU-A-D                           |
| Input voltage           | VAC | 85-264                              | 85-264                          | 100-240                           |
| Modulation              |     | TTL modulation<br>Analog modulation |                                 |                                   |
| Modulation<br>frequency | kHz | TTL up to 30<br>Analog up to 30     | TTL up to 30<br>Analog up to 30 | TTL up to 100<br>Analog up to 100 |

## ENVIRONMENTAL CONDITIONS

|                       |    |                        |
|-----------------------|----|------------------------|
| Operating temperature | °C | 10°C to 35°C           |
| Storage temperature   | °C | -20 °C to +80 °C       |
| Humidity              | %  | < 90 %, non-condensing |

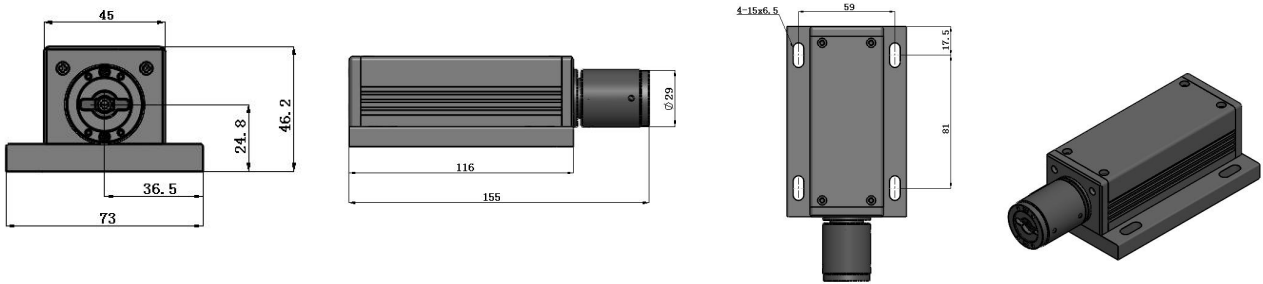
## KEYNOTES

\*All testing data under the conditions of temperature 25°C.

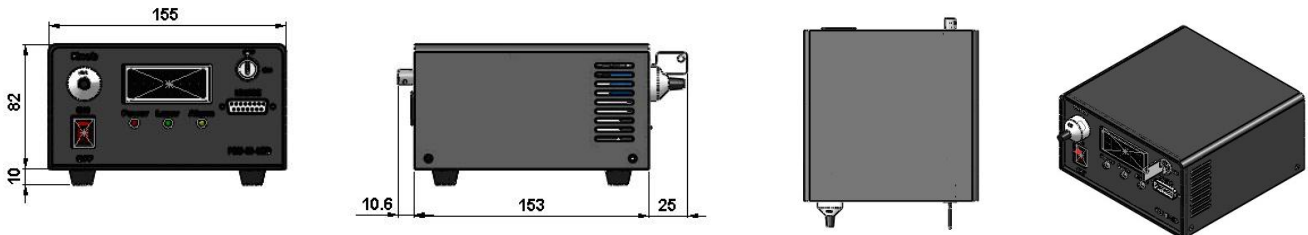
## MECHANICAL SPECIFICATIONS

|                            |    |                  |                  |                |
|----------------------------|----|------------------|------------------|----------------|
| Dimensions of laser head   | mm | 155 x 73 x 46.2  |                  |                |
| Dimensions of power supply | mm | PSU-III-LED      | PSU-III-FDA      | PSU-A-D        |
|                            |    | 188.6 x 155 x 92 | 171 x 130 x 62.2 | 162 x 144 x 70 |
| Material                   |    | Aluminum         |                  |                |

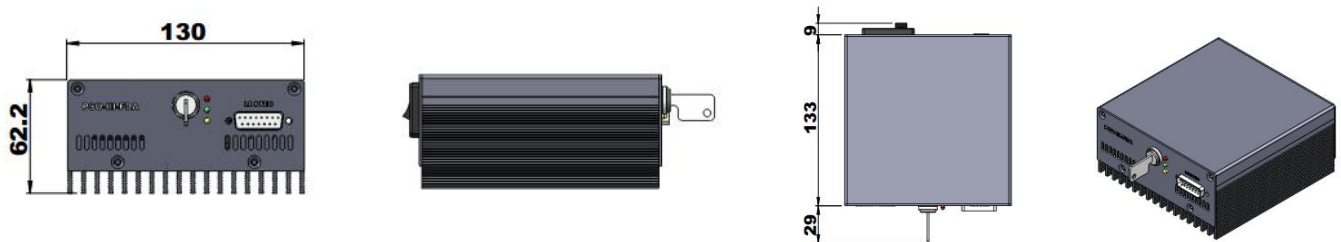
### DIMENSIONS OF LASER HEAD (mm):



### DIMENSIONS OF POWER SUPPLY FOR PSU-III-LED (mm):



### DIMENSIONS OF POWER SUPPLY FOR PSU-III-FDA (mm):



### DIMENSIONS OF POWER SUPPLY FOR PSU-A-D (mm):

